DOCUMENT RESUME

ED 284 774 SO 018 165

AUTHOR Chiu, Lian-Hwang
TITLE Locus of Control Differences between American and Chinese Adolescents.
PUB DATE Apr 87
NOTE 16p.; Paper presented at the Henry Lester Smith Research Conference (12th, Bloomington, IN, April 1-3, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Achievement; Attribution Theory; *Cross Cultural Studies; Failure; Foreign Countries; Grade 10; *Locus of Control; Personality Studies; *Personality Traits; Self Concept; Social Science Research; *Success
IDENTIFIERS *Chinese People; *Taiwan

ABSTRACT

The construct of locus of control formulated by Rotter (1966) is being increasingly emphasized in personality functioning, since it appears to be related to several classes of behavior. It is also being considered as an important construct in cross-cultural research. Cross-cultural comparisons are particularly important, not just because they may ultimately mediate group differences in certain kinds of behavior, but also because of their implications with respect to the antecedents of internal-external beliefs. The Intellectual Achievement Responsibilities Questionnaire (IAR) was administered to 194 U.S. adolescents, half males, half females. A translated version of the IAR Was administered to the same number of Chinese adolescents in the northern part of Taiwan. The results showed that in comparison with Chinese adolescents, U.S. adolescents were more internal in the attribution of their successes but more external in the attribution of their failures. Furthermore, American subjects were more internal in the attribution of their successes than their failures while the opposite was true for Chinese adolescents. (Author/BZ)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Lian-Hwang Chiu
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED284774

Locus of Control Differences between American and Chinese Adolescents

Lian-Hwang Chiu

Indiana University at Kokomo

Abstract

The Intellectual Achievement Responsibilities Questionnaire (IAR) was administered to 194 American adolescents, half males and the other half females. A translated version of the IAR was administered to the same number of Chinese adolescents. The results showed that in comparison with Chinese adolescents, the Americans were more internal in the attribution of their successes but more external in the attribution of their failures. Furthermore, American subjects were more internal in the attribution of their successes than their failures, while the opposite was true for Chinese adolescents.

SO018165

BEST COPY AVAILABLE

Locus of Control Differences between American and Chinese Adolescents

Lian-Hwang Chiu

Indiana University at Kokomo

The construct of the locus of control formulated by Rotter (1966) is being increasingly emphasized in personality functioning (Lefcourt, 1976; Phares, 1976), since it appears to be related to or to influence several classes of behavior. It is also being considered as an important construct in cross-cultural research (Dyal, 1984). As noted by Phares (1976), such cross-cultural comparisons are particularly important, not just because they may ultimately mediate group differences in certain kinds of behavior, but also because of their implications with respect to the antecedents of internal-external beliefs.

Despite the fact that the research relevant to the cross-cultural application of the locus of control construct is now quite extensive, relatively few investigations can be found in the literature that have dealt with comparisons between American and Chinese cultures. Hsiesh et al. (1969) compared Hong Kong Chinese adolescents with American Chinese and Anglo-Americans. They found the Hong Kong Chinese to be most external, the American Chinese intermediate, and the Anglo-Americans most internal in their beliefs in the locus of control. By contrast, Christy (1978) discovered Hong Kong Chinese more internal than American-born Chinese when she compared community college females

from the two societies. However, as pointed out by Lao et al. (1977), the Hong Kong Chinese should not be considered as typical Chinese, because Hong Kong has been a British colony for a long time, and many of the values and social expectations are a blend of both Chinese and British traditions. Utilizing the Intellectual Achievement Responsibilities Questionnaire (IAR) (Crandall et al. 1965), Chiu (1986) made comparisons between American sixth and eighth graders and the Taiwanese counterparts representing more typical Chinese culture. The results showed that American children were more internal in success situations, but the direction of differences was reversed in failure situations.

Hsiesh et al. (1969) and Chiu (1986) argued, following Hsu (1953; 1970; 1981), that American ways of life were individual-centered and placed a great deal of emphasis on self-reliance. Life experiences appear to be largely a consequence of one's actions. If individuals are successful, the success is their own, being attributed to their own efforts or abilities. Chinese culture, in contrast, is situation-centered. It emphasizes the interdependence of individuals within larger groups such as the family and the clan. If individuals are successful, the success is attributed to and shared with those who are related to them. Accordingly, it is predicted that Americans will be more internal than Chinese, particularly in successful situations. Both studies confirmed this hypothesis.

On the other hand, Chiu (1986) also found that Chinese children assumed more responsibility for failure events than American children,

contrary to successful situations. Similar findings were reported by Chandler et al. (1981) in their cross-cultural comparisons on the locus of control among five cultures including Japan, India, South Africa, the United States, and Yugoslavia. They found the Japanese sample to be highly external in the attribution of their successes, but most internal of all groups in attributing failures. These findings were not contradictory to Hsu's observations. He contends that Chinese never enjoy the intense, personal glory which crowns their American counterparts, but neither do they suffer deeply alone should they slip or fail (Hsu, 1953; 1970; 1981). In other words, living in a culture that emphasizes mutual dependence, Chinese can expect support and acceptance from significant others if they encounter failures. Consequently, they have less need to be self-protecting and self-defensive for their failure and tend to be more internal than Americans.

The purpose of this study was to compare adolescents' beliefs in the locus of control between American and Chinese cultures. Based upon the cultural differences and previous findings presented above, it is hypothesized that (a) American adolescents are more internal than Chinese adolescents in the attribution of their successes, (b) Chinese adolescents are more internal than American adolescents in the attribution of their failures, and (c) American adolescents are more internal in the attribution of their successes than their failures, and Chinese adolescents are more internal in the attribution of their failures than their successes.

Method

Subjects

The American sample consisted of 194 tenth grade students, half males and the other half females. These adolescents were selected from three different high schools in the community of middle- and working-class families in a midwest state. The Chinese sample was composed of exactly the same number of tenth grade students for each sex as the American sample. They were drawn from three different high schools located in the northern part of Taiwan. Their family backgrounds were also middle- and working-class.

The median and quartile deviation of age for the American subjects were 16 years 2 months, and 4 months, respectively. The corresponding values for the Chinese group were identical with the American sample. The socioeconomic status for both groups was comparable as far as the occupation of the head of household was concerned.

Instrument

Crandall's IAR (Crandall et al. 1965) was used for the study. It consists of 34 forced-choice items, each of which describes either a positive or negative achievement experience and is followed by two alter-natives. One alternative states that the event is caused by the individual's own behavior, while the other attributes the cause of the event to an external source. Half of the items describe positive experiences, and the other half, negative experiences.

The IAR yields three scores. An I+ score, consisting of the number of internal alternatives the subjects endorse for positive experiences, represents the degree of their beliefs in personal responsibility for success. An I- score, consisting of the number of internal alternatives the subjects choose for negative events, indicates the extent of their beliefs in personal responsibility for failures. A total I is the sum of these two scores.

The IAR was translated into Chinese by the author. The back translation method was employed to validate the authenticity of the original (Brislin, 1980). After the original items were translated into Chinese, two psychologists, who were fluent in both languages, were asked to translate them back into English. A third person was consulted to resolve the disagreements.

Since a translated version of the original IAR was used in the study, it is advisable to estimate its reliability. The split-half method and the Spearman-Brown Prophecy Formula were applied. The reliability coefficients for American males and females were .61 and .50 for I+; .42 and .45 for I-. For Chinese subjects, the corresponding values were .63 and .65; .56 and .53 respectively. These reliability coefficients were comparable with those reported by Crandall et al. (1965).

Procedures

The questionnaire was administered to both American and Chinese subjects on a group basis in individual classrooms by their teachers. The Americans responded to the original version, and the Chinese, the

translated version. They were told not to spend too much time on any one item and not to write their names on the questionnaire. They were also informed that their responses were to be used in a study and would not be seen by anyone at the school, including their teachers.

Crandall et al. (1965) reported generally low correlations between I+ and I- subscales. Similar relations were found in this study. The correlations were .34 and .19 for American males and females; .17 and .08 for Chinese subgroups. Three of these correlations did not reach a significance level. The obvious independence of the two subscales may mean, as suggested by Crandall et al. (1965), that assuming responsibility for successful experiences may be different from assuming responsibility for failure experiences. It also raises some doubt about the use of the total I score and suggests that the statistical analysis for I+ and I- scores should be performed separately.

Results

Group means and standard deviations of I+ and I-, and the total I scores were computed separately for each subgroup. Table 1 presents these descriptive statistics with respect to culture and gender. Cross-cultural comparisons of these scores will be reported in the following sections.

Insert Table 1 Here

Cross-Cultural Comparisons of Internality in Success Situations

A 2x2 analysis of variance, representing culture and gender, was performed on I+ scores. The results showed that there was a significant main effect of culture (F (1,384) = 14.96; $p<.01$), indicating American adolescents were significantly more internal than their Chinese counterparts in assuming personal responsibility for success events. A posterior comparison was made between the corresponding cultural subgroups with respect to gender. It was found that American males were more internal than Chinese males (t=1.76; $p<.05$, one-tailed); American females also obtained higher I+ scores than Chinese females (t=3.71; $p<.01$, one-tailed). Thus, hypothesis (a) which states that American adolescents are more internal than Chinese adolescents in the attribution of their successes was confirmed.

Neither the main effect of gender nor the interaction effect between culture and gender reached a significance level.

Cross-Cultural Comparison of Internality in Failure Situations

Hypothesis (b) which states that Chinese adolescents are more internal than American adolescents in the attribution of their failures was also confirmed by the data. A 2x2 (culture x gender) analysis of variance was performed on the I- scores. A strong main effect of culture was found (F (1,384) = 57.05; $p<.01$), indicating Chinese subjects obtained significantly higher I- scores than their American counterparts. Posterior analyses showed that, in the attribution of responsibility in failure situations, Chinese males were more internal than American males (t=6.80; $p<.01$, one-tailed); Chinese females

were more internal than American females (t=3.88; p<.01, one-tailed). It should be noted that the direction of cultural differences in failure situations was reversed from that in success situations.

There was a significant main effect of gender (F (1,384) = 10.18; p<.01). Females obtained significantly higher I- scores than did the male subjects. Further analysis revealed that this gender difference was mainly contributed by the American sample in which females were significantly more internal than males (t=3.72; p<.01). The difference between females and males in the Chinese sample was not significant, although the trend was in the same direction. The interaction effect between culture and gender was statistically significant (F (1,384) = 4.26; p<.05).

Cross-Cultural Comparison For Difference of Attribution in Success and in Failure Situations

In order to test hypothesis (c) which states that American adolescents were more internal in the attribution of their success than their failures, and that Chinese adolescents were more internal in the attribution of their failures than their successes, a t test for correlated observations was performed to compare I+ and I- scores for each subgroup. The results confirmed this hypothesis. Both American males and females were significantly more internal in success than in failure situations (t=4.66, 2.61 respectively; p<.01, one-tailed). In contrast, both Chinese males and females were significantly more internal for failure events than for success events (t=4.46, 5.82 respectively; p<.01, one-tailed).

Discussion and Conclusion

Cross-cultural comparisons of I+ and I- scores between the two cultures and the comparisons of the scores of the two subscales confirmed all the hypotheses. American adolescents, male and female, were more internal than their Chinese counterparts in the attribution of their success, but the direction of the difference was reversed when responding to negative experiences. In failure situations, Chinese subjects were more internal than American subjects. These findings were consistent with the author's previous study which dealt with younger children (Chiu, 1986). They were also consistent with the study by Chandler et al. (1981) in which they made cross-cultural comparisons on locus of control among different cultures including Japan and four other countries.

Furthermore, American adolescents expressed a higher degree of internality in successful than in failure situations. On the contrary, Chinese adolescents tended to assume personal responsibility more for failure than for success outcomes. This same tendency was found separately in a study by Crandall et al. (1965) using American children as subjects; and in a study by Wu (1975), using Chinese children as subjects.

A central assumption of attribution theory is that people will attempt to maintain a positive self-image (Aronson, 1972). Therefore, when anything good happens, they are likely to attribute it to their own efforts or abilities, but when anything bad happens, they tend to believe that it is due to factors over which they had no control.

This assumption is congruent with individual-centered American culture (Hsu, 1953; 1970; 1981) which places a great deal of emphasis on self-reliance, independence, and individual competitive success. Responses from the American sample tended to support this assumption. However, for Chinese who live in a situation-centered society (Hsu, 1953; 1970; 1981) which emphasizes personal modesty and interpersonal relationships, this assumption does not hold completely. It is as important for Chinese as for Americans to maintain a positive self-image, but the Chinese have less need to blame others for their failures because they know they can depend on their supports. Accordingly, when anything bad happens, they are likely to assume personal responsibility, but when anything good happens, they tend to share the credit with significant others. Again, this interpretation was consonant with the responses from the Chinese subjects. A similar contrast has been found by Chandler et al. (1981) where among the five cultures sampled, only the Japanese subjects failed to confirm the self-serving bias (Miller and Ross, 1975) that successes are attributed more to personal responsibilities than are failures.

Although the data confirmed the hypotheses, we should be cautious in the interpretations of these results. Two concerns are particularly to be noted. First, the Chinese sample was asked to respond to a translated version of the IAR. Despite the fact that a standard back translation method was employed to validate the authenticity of the original, the two versions of the instrument may not measure the same thing in the two cultures. Second, the ability

levels of the two samples were not measured; consequently, there was no way to know whether they were comparable. These two factors may have influenced the results, thus limiting the validity of the study.

Despite these possible limitations, it is apparent that beliefs in the locus of control not only varied according to cultures but also according to situations. As compared with Chinese adolescents, American adolescents were more internal in the attribution of their successes, but more external in the attribution of their failures. They also expressed a higher degree of internality in successful than in failure situations, while the opposite was true for their Chinese counterparts.

References

Aronson, E. (1972). The social animal. San Francisco: W.H. Freeman.

Brislin, R.W. (1980). Translation and content analysis of oral and written materials. In H.C. Triandis & J.W. Berry (Eds.), Handbook of cross-cultural psychology: Methodology, Vol. II. Boston, MA: Allyn and Bacon.

Chandler, T.A., Shama, D.D., Wolf, F.M., & Planchard, S.K. (1981). Multiattributional causality: A five cross-national samples study. Journal of Cross-Cultural Psychology, 12, 207-221.

Chiu, L.H. (1986) Locus of control in intellectual situat ons in American and Chinese school children. International Journal of Psychology, 21, 167-176.

Christy, L.C.T. (1978) Cultural and control orientation: A study of internal-external locus of control in Chinese and American-Chinese women. Dissertation Abstracts International, 39, 770-A.

Crandall, V.C., Katkovsky, W., & Crandall, V.J. (1965). Children's beliefs in their own control of reinforcements in intellectual-academic achievement situations. Child Development, 36, 91-109.

Dyal, J.A. (1984). Cross-cultural research with the locus of control construct. In H.M. Lefcourt (Ed.) Research with the Locus of Control Construct, Vol. 3, Extensions and Limitations. New York: Academic press.

Hsiesh, T.T.Y., Shybut, J., & Lotsof, E.J. (1969). Internal versus external control and ethnic group membership: A cross-cultural comparisons. Journal of Counseling and Clinical Psychology, 33, 122-124.

Hsu, F.L.K. (1953, 1970, 1981). American & Chinese: Passage to differences. Honolulu, HI: The University Press of Hawaii.

Lefcourt, H.M. (1976). Locus of control for specific goals. In L.C. Perlmutter & R.A. Monty (Eds.), Choice and perceived control. Hillsdale, NJ: Erlbaum.

Miller, D.T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? Psychological Bulletin, 82, 213-225.

Phares, E.J. (1976). Locus of control in personality. Morristown, NJ: General Learning Press.

Rotter, J.B. (1966). Generalized expectancies in internal versus external control of reinforcement. Psychological Monographs, 1966, 80 (1, Whole No. 609).

Wu, W.T. (1975). Children's sex, locus of control, and academic achievement. Bulletin of Educational Psychology, 8, 107-114.

Table 1

Means and Standard Deviations of IAR

Scores for American and Chinese Adolescents

	American Subjects				Chinese Subjects			
	Males (n=97)		Females (n=97)		Males (n=97)		Females(n=97)	
	M	SD	M	SD	M	SD	M	SD
I+	12.50	2.43	13.09	2.21	11.86	2.67	11.74	2.69
I-	11.19	2.34	12.34	2.25	13.30	2.26	13.55	1.71
Total I	23.69	3.95	25.43	3.43	25.16	3.79	25.29	3.30